

What is claimed is:

1. A system for monitoring machines operating at at least one shop floor, the system comprising:
  - a plurality of information collectors linked to the machines for automatically obtaining machine-related signals and converting the machine-related signals into computer-readable information;
  - a monitoring computer electrically connected to the information collectors for obtaining the computer-readable information from the information collectors;
  - a database electrically connected to the monitoring computer for storing the computer-readable information collected by the monitoring computer and for storing fundamental data set by users; and
  - a graphical user interface electrically connected to the database for users to monitor production information.
2. The system of claim 1, wherein the machine-related signals include machine status, die status and current production information.
3. The system of claim 1, wherein each of the information collectors is attached to a corresponding machine.
4. The system of claim 1, wherein the information collectors are connected to the monitoring computer via a communication link.
5. The system of claim 1, wherein the fundamental data include machine fundamental data.
6. The system of claim 1, wherein the fundamental data include die fundamental data, and the die fundamental data include die standard status, and a range of settings that an operator can select to immediately adjust operation of a die.
7. The system of claim 6, wherein the die fundamental data include a reference table of die-vs-part number.

8. The system of claim 1, wherein the graphical user interface has icons for viewing the machines and viewing real-time information on the machines or on dies.

9. A method for monitoring machines operating at at least one shop floor, the method comprising the steps of:

obtaining machine-related signals from the machines and changing the machine-related signals into computer-readable information via information collectors;

obtaining the computer-readable information from the information collectors and storing the obtained information in a database via a monitoring computer; and

selectively illustrating on a user interface a part of the information stored in the database.

10. The method of claim 9, further including the step of storing fundamental data in the database.

11. The method of claim 9, wherein the obtaining of the computer-readable information from the information collectors is performed by information-obtaining instructions that are stored in advance in the monitoring computer.

12. The method of claim 9, wherein the computer-readable information obtained by the monitoring computer includes machine status and die status.

13. The method of claim 12, further comprising the step of forecasting a lifetime of a die according to obtained die status information.

14. The method of claim 10, further comprising the step of generating information on abnormality status of any of the machines by comparing the obtained information with the fundamental data.

15. A procedure of operating a system for monitoring machines operating on at least one shop floor, comprising in sequence the steps of:

logging into the system;  
set fundamental data;  
storing the data and outputting a corresponding report and ending this procedure, or further selecting real-time information;  
storing the data and the information and outputting a corresponding report and ending this procedure, or further inquiring desired information;  
verifying normality of the information and the data;  
inquiring a historical record if abnormal, or directly checking whether a schedule change is desired if normal;  
analyzing reasons if abnormal;  
if abnormal, storing the information, the data and the reasons and outputting a corresponding report and ending the procedure, or checking whether a schedule change is desired;  
ending the procedure if no changing or no reschedule is desired;  
determining whether manually inputting information of schedule change if changing or rescheduling is desired;  
manually inputting and storing the information and outputting a corresponding report and ending the procedure if manual input is desired, or selecting and storing standard schedule if manual input is undesired; and  
outputting a report reflecting corresponding information and ending the procedure.